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(35)

No. 04-1350

FILED
OCT 16 2006
SUPREME COURT, U.S.

In the
Supreme Court of the United States

KSR INTERNATIONAL CO.,
Petitioner,

v.

TELEFLEX, INC., *et al.*,
Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

BRIEF FOR *AMICI CURIAE* 3M CO., GENERAL ELECTRIC CO., PROCTER & GAMBLE CO., E.I. DUPONT DE NEMOURS AND CO., AND JOHNSON & JOHNSON IN SUPPORT OF RESPONDENTS

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INTEREST OF THE *AMICI CURIAE* [1]

The *Amici* have been leaders in America's technological innovation for over 100 years. Their patent portfolios protect their enormous investments in research and development, and they regularly rank near the top of the annual list of United States patent recipients. As patent holders and defendants in patent litigation, the *Amici* have a strong interest in clear and predictable patent laws, which have become essential to the continued vitality of the country's economy.

Amici believe that the Federal Circuit's flexible "motivation, suggestion, or teaching" test provides such predictability for the inherently subjective obviousness standard. The Federal Circuit's test provides an objective, yet flexible, evidentiary framework for obviousness determinations to guard against hindsight subjectivity. The Federal Circuit's flexible "motivation, suggestion, or teaching" test requires specific evidence showing why one skilled in the art would have had a ***reason*** to combine or modify the prior art to reach the claimed invention. In other words, a claimed invention cannot be held obvious just because it seems so after the fact to a patent examiner, judge, or jury.

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[1] Counsel for the parties have consented in writing to the filing of this brief, and their letters of consent have been filed with the Clerk. Pursuant to Rule 37.6, no counsel for either party had any role in authoring this brief in whole or in part, and no party other than the named *Amici* has made any monetary contribution toward the preparation and submission of this brief.

Amicus 3M Co., which began operations in 1902, is a diversified technology company with a global presence in the health care, industrial, display and graphics, consumer and office, safety, security and protection services, electronics and telecommunications, and transportation markets. 3M sells more than 50,000 goods and services to customers around the world. Annual R&D spending at 3M exceeds $1 billion, and to protect this investment, 3M owns over 7,000 United States patents and over 19,000 patents around the world. In 2005, 3M was awarded 487 United States patents.

Amicus General Electric Co. is one of the largest and most diversified industrial corporations in the world. Since its incorporation in 1892, GE has developed a wide variety of products for the generation and utilization of electricity. GE is a major supplier of other technologies and services in fields as varied as healthcare, homeland security, financial services, and entertainment. Total research and development expenditures at GE were $3.4 billion in 2005. GE also has a substantial patent portfolio, with over 18,000 United States patents, 1,180 of which were issued last year.

Amicus The Procter & Gamble Company, founded in 1837, is the largest consumer products company in the world. It markets over 300 products, including 22 brands with one billion dollars or more in sales, in 140 countries. Research and product development are central to Procter & Gamble's success as reflected by approximately $1.8 billion in annual R&D spending and over 40,000 patents worldwide.

Amicus E.I. du Pont de Nemours and Company is a science company. Founded in 1802, it is a world

leader in science and technology in a range of disciplines, including biotechnology, electronics, materials science, safety and security. In 2005, DuPont's research and development expenditures were $1.3 billion and it was granted approximately 400 United States patents. Since 1804, when company founder E.I. du Pont was granted DuPont's first patent, DuPont has been awarded nearly 34,000 U.S. Patents.

Amicus Johnson & Johnson began as a medical products business in 1886. Today, Johnson & Johnson is the world's most comprehensive and broadly based manufacturer of health care products, for the consumer, pharmaceutical, biotechnology, and medical device and diagnostics markets. Johnson & Johnson's more than 200 operating companies employ approximately 115,000 men and women. In 2006, these companies will invest nearly $7 billion in research and development; they now hold over 7,000 United States patents.

SUMMARY OF THE ARGUMENT

Amici support the Federal Circuit's current "motivation, suggestion, or teaching" test as the exclusive standard for determining whether or not prior art may be combined or modified to conclude that a claim in a patent or patent application would have been obvious to a person of ordinary skill in the art at the time the invention was made.[2] For the past

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[2] *Amici* do not express a view on the merits of this case. They support Respondents' position, however, that the Federal Circuit's current "motivation, suggestion, or teaching" test should be preserved as the sole standard for determining the propriety of a prior art combination or modification.

quarter of a century, this test has offered an objective, yet flexible, evidentiary standard on which patentees and the public have come to rely. The test, flexible in theory and application, is an evidentiary standard that guards against the danger of hindsight bias and the risk of arbitrary decision-making. Contrary to arguments raised against it, this test does not require an express teaching in the prior art to combine or modify the cited references. Rather, it requires no more than the identification of supporting evidence or the articulation of the reason that a hypothetical skilled artisan would have been expected to come up with the patented invention. This objective evidentiary framework prevents patent challengers from picking and choosing disparate ideas out of the prior art, and simply lumping them together without explanation, to re-create a patented invention.

If the Court eliminated the "motivation, suggestion, or teaching" standard, obviousness determinations would become subject to unfettered subjectivity and resulting unpredictability. There would be no evidentiary safeguard against hindsight bias in obviousness determinations by patent examiners, judges, or juries. Hindsight bias is a very real problem when a factfinder makes an after-the-fact determination regarding obviousness. As numerous empirical studies in litigation and other contexts have demonstrated, factfinders aware of a certain outcome are significantly more likely to fall prey to hindsight bias and incorporate expectations about the outcome in their decisions.

Moreover, the Federal Circuit's 25 years of jurisprudence applying the "motivation, suggestion, or

teaching" test has created settled expectations in the inventive and business communities. Changes to such settled rules of law involve numerous policy considerations, which should be left to Congress rather than the courts.

Contrary to the arguments of KSR and its *amici*, the Federal Circuit's "motivation, suggestion, or teaching" test is consistent with the Congressional intent and policy underlying 35 U.S.C. § 103(a), which was intended to prevent the same types of hindsight reconstructions of inventions that the "motivation, suggestion, or teaching" test seeks to prevent. Indeed, Congress expressly forbade *ex post* reconstructions of the claimed invention from the prior art by requiring that obviousness be decided "at the time the invention was made." Likewise, this Court has often warned against the use of hindsight in deciding obviousness, and the Federal Circuit's "motivation, suggestion, or teaching" test is nothing more than an effective implementation of this concern—a fine-tuning of this Court's law that is the Federal Circuit's central role.

Finally, although no one claims it is perfect, the Federal Circuit's "motivation, suggestion, or teaching" test is superior to the alternatives presented in this case by KSR and its *amici*. Taking one example in particular, the Government's proposed "extraordinary level of innovation" test does not find support in this Court's precedent, provides no meaningful or objective guidance to the Patent & Trademark Office, to courts or to parties appearing before them, and does nothing to guard against the risk of hindsight bias in obviousness determinations. By injecting added subjectivity into the determination, the Gov-

ernment's proposed test would exacerbate the risk of hindsight and arbitrary decision-making on the question of obvious/nonobvious.

ARGUMENT

I. *AMICI* SUPPORT THE FEDERAL CIRCUIT'S "MOTIVATION, SUGGESTION, OR TEACHING" TEST AS AN OBJECTIVE, YET FLEXIBLE, EVIDENTIARY STANDARD FOR THE INHERENTLY SUBJECTIVE OBVIOUSNESS INQUIRY

Amici strongly support the Federal Circuit's existing "motivation, suggestion, or teaching" test as the exclusive standard for determining whether or not a combination or modification of the prior art may be made to render a claimed invention obvious. Since the inception of the Federal Circuit, this test has come to offer an objective evidentiary standard on which patentees and the public have come to rely. The Federal Circuit's test provides an objective evidentiary framework for patent applicants and patent examiners to use to assess the patentability of claimed subject matter during prosecution in the Patent & Trademark Office. Likewise, patentees and defendants in litigation involving issued patents have a clear understanding of the evidence needed to support an obviousness defense, and judges and juries have a framework against which they can measure the patent challenger's obviousness evidence. As such, the Federal Circuit's test lends objectivity and predictability to the inherently subjective question of what would have been obvious to one skilled in the art at the time the invention was made.

A. The Federal Circuit's Test Is Flexible In Theory and Practice

KSR and its *amici* criticize the Federal Circuit's "motivation, suggestion, or teaching" standard for being too "rigid" and too demanding because it allegedly requires the identification of an explicit teaching in a prior art reference. *E.g.* Pet. Br. at 32-43; *Amici* Br. for Time-Warner *et al.*, at 9-17. In doing so, they attack the proverbial straw-man, knocking down a standard that does not exist.

To the contrary, the motivation to combine does *not* need to be explicit or even written. As the Federal Circuit explained on numerous occasions, "[a] suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as 'the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references.'" *In re Kahn*, 441 F.3d 977, 986 (Fed. Cir. 2006) (quoting *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000)). In fact, evidence for the requisite motivation, suggestion, or teaching "may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved." *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1125 (Fed. Cir. 2000).

This flexible approach is not a mere theory; the Federal Circuit applies it in practice as well. *E.g.*, *Dystar Texilfarben GmbH & Co. v. C.H. Patrick Co.*, — F.3d —, 2006 WL 2806466, at *12-13 (Fed. Cir. Oct. 3, 2006); *Alza Corp. v. Mylan Labs.*, — F.3d —, 2006 WL 2556356, at *6-8 (Fed. Cir. Sept. 6, 2006) (affirming obviousness determination where expert

testimony alone provided the evidence of the motivation to combine); *Ormco Corp. v. Align Technology, Inc.*, — F.3d —, 2006 WL 2493245, at *6-7 (Fed. Cir. Aug. 30, 2006) (finding obvious orthodontic device patent claim requiring the provision of instructions to patients based on motivation to combine from general medical practice and FDA regulations); *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1322 (Fed. Cir. 2005) (noting that "the motivation to combine need not be found in prior art references, but equally can be found in the knowledge generally available to one of ordinary skill in the art" such as knowledge of a problem to be solved); *Sandt Tech., Ltd. v. Resco Metal & Plastics Corp.*, 264 F.3d 1344, 1355 (Fed. Cir. 2001) (ruling that the motive to alter the prior art came from the fact that the substitute material "was a cheaper, faster, and more convenient method of attachment").

Because the "motivation, suggestion, or teaching" test permits explicit or implicit evidence, it is quite flexible in practice, and "has permitted [the Federal Circuit] to continue to address an issue of law not readily amenable to bright-line rules, as we recall and are guided by the wisdom of the Supreme Court in striving for a 'practical test of patentability.'" *Alza*, 2006 WL 2556356, at *4 (quoting *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966)). Indeed, in the face of misinterpretations of the standard by various parties, the Federal Circuit has recently re-emphasized that the test is flexible. *See Dystar*, — F.3d —, 2006 WL 2806466, at *12-13; *Ormco*, — F.3d —, 2006 WL 2493245, at *6-7; *Alza*, — F.3d —, 2006 WL 2556356, at *6-8; *In re Kahn*, 441 F.3d at 987-88. These recent cases aptly demonstrate the flexibility of the Federal Circuit's "motivation, suggestion, or

teaching" test to guide the obviousness inquiry in disparate technology areas and in the context of differing evidence offered to show obviousness.

B. The "Motivation, Suggestion, or Teaching" Test Is An Evidentiary Standard That Fosters Predictability and Fairness

Nonobviousness is an inherently subjective and notoriously difficult inquiry. It requires a patent examiner, or a judge or jury, to place himself or herself in the shoes of a hypothetical "person of ordinary skill in the art," working often years in the past at a point in time before conception of the invention, and all the while resisting the very natural, but dangerous, temptation to use hindsight. Due to its nature, there is a great risk of unfettered subjectivity in performing this analysis—in concluding that the claim is "obvious because it seems pretty obvious to me."

The Federal Circuit's test is, and has always been, an objective evidentiary standard designed generally to lend objectivity to this analysis. Specifically, the test guards against the danger of hindsight bias. *Alza*, — F.3d —, 2006 WL 2556356, at *3 ("At its core, our anti-hindsight jurisprudence is a test that rests on the unremarkable premise that legal determinations of obviousness, as with such determinations generally, should be based on evidence rather than on mere speculation or conjecture."); *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998) (indicating that a showing of a suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding").

In the patent prosecution context, this evidentiary standard stands as a procedural safeguard against arbitrary agency action. As the Federal Circuit has explained:

> [R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be *some* articulated reasoning with *some* rational underpinning to support the legal conclusion of obviousness. This requirement is as much rooted in the Administrative Procedure Act, which ensures due process and non-arbitrary decisionmaking, as it is in § 103.

In re Kahn, 441 F.3d at 987-88 (emphases added). The administrative process does not condone arbitrary actions based on no more than a "because I said so" assertion, and this evidentiary standard affords applicants and reviewing courts the opportunity to understand the specific evidence underlying the agency's reasoning and decision.

In litigation, this evidentiary standard provides meaningful guidance to juries and judges, helping them to overcome hindsight and truly base their conclusions on the art "at the time the invention was made." 35 U.S.C. § 103(a). Rather than imposing an unnecessary hurdle, this flexible evidentiary standard merely requires the party challenging the validity of a patent, which enjoys a statutory presumption of validity, 35 U.S.C. § 282, to explain to the fact-finder what would have caused or "motivated" the skilled artisan to bridge the gap between the prior art and the patented invention. This evidentiary standard respects the statutory presumption of va-

lidity and ensures that the burden of proof remains on the party designated by law and precedent.

This evidentiary standard is likewise crucial to orderly and proper appellate review from agency or court decisions. Without the standard's guidance and the requisite identification of *some* evidence justifying the combination of prior art, appellate review would become a pure guessing-game, rather than the appropriate scrutiny required by applicable law, rules, and precedent. *See Dennison Mfg. Co. v. Panduit Corp.*, 475 U.S. 809-811 (1986) (vacating nonobviousness determination because the Federal Circuit failed to apply the standard of Fed. R. Civ. P. 52(a) to the factual determination of the district court).

Without this evidentiary standard, patent applicants and litigants would be left at the mercy of an agency, or a judge's or jury's decision, even if arbitrary or animated more by hindsight bias than the *ex ante* inquiry required by the statute. Effective appellate review of such decisions would be difficult, if not impossible, given the lack of any meaningful evidentiary standard by which to review the decision that one skilled in the art would have been motivated to combine or modify the prior art to arrive at the claimed invention.

II. THE FEDERAL CIRCUIT'S FLEXIBLE "MOTIVATION, SUGGESTION, OR TEACHING" TEST IS ESSENTIAL TO THE PATENT SYSTEM

There are few, if any, issues as fundamental or pervasive in patent law as the issue of obviousness. Nonobviousness is the ultimate test of patentability for all inventions. It is an issue that must be consid-

ered during the examination and before the grant of every U.S. patent application. Obviousness is a defense raised in virtually every patent infringement case.

At the same time, the question of what would have been obvious to a person of ordinary skill in the art at the time the invention was made is notoriously subjective and difficult. Even the best-intentioned patent examiner, judge, or juror may be unable to answer that question without allowing hindsight to creep into his or her thinking.

Thus, objective evidentiary standards to help guide the obviousness inquiry are essential to provide consistency and objectivity to this fundamental issue of patent law. For almost 25 years, patent owners and their competitors have invested in R&D, and have built patent portfolios, under the Federal Circuit's "motivation, suggestion, teaching" requirement. A fundamental change in that requirement now not only would undermine those investments and settled expectations, but would also inject added uncertainty and unpredictability into the patent system. Such a result would ultimately unbalance the incentive system upon which the patent laws are based.

A. The Lack of Objective Evidentiary Standards To Guard Against Hindsight Bias in Obviousness Determinations Would Undermine the Patent Incentive System

Although KSR and its *amici* agree that obviousness determinations based on hindsight are undesirable, *e.g.*, Gov't *Amicus* Br. at 20-21; IBM *Amicus* Br. at 17, they consistently brush aside this concern.

Some *amici*, like the United States, even attempt to downplay the danger of hindsight, *e.g.*, Gov't *Amicus* Br. at 20-21, which the Federal Circuit has plainly identified as the evil to be remedied by the "motivation, suggestion, teaching" requirement. *See In re Kahn*, 441 F.3d at 986. However, a large body of empirical studies has shown that hindsight bias is common in everyday life and in the law.

Long acknowledged in cultural adages such as "Monday morning quarterbacking" or "20/20 hindsight," hindsight bias is a well-known cognitive phenomenon and has been the subject of many scientific studies. *E.g.*, S. A. Hawkins & R. Hastie, *Hindsight: Biased Judgments of Past Events after the Outcomes are Known*, PSYCHOLOGICAL BULLETIN 107, no. 3, at 311-27 (1990) (reviewing and analyzing research on hindsight bias); B. Fischoff, *Hindsight is Not Equal to Foresight: The Effect of Outcome Knowledge on Judgment Under Uncertainty*, 1 J. OF EXPERIMENTAL PSYCHOL.: HUM. PERCEPTION & PERFORMANCE 288, 289-91 (1975) (demonstrating that study subjects aware of the outcome of an event were 14.7-23.4% more likely to predict the occurrence of that outcome).

These studies have consistently demonstrated and documented the existence of hindsight bias using a variety of different methods, materials, and subjects. *See* J. Christensen-Szalanski & C.F. Willham, *The Hindsight Bias: A Meta-analysis*, 48 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 147, 150 (1991) (providing a meta-analysis of hindsight bias empirical studies and concluding that 122 out of 128 studies reported a significant hindsight bias effect). Remarkably, this cognitive phe-

nomenon equally afflicts lay persons and experts across diverse backgrounds and in many different fields. *See, e.g.*, K. A. Kamin & J. J. Rachlinski, *Ex Post ≠ Ex Ante: Determining Liability in Hindsight*, 19 LAW & HUM. BEHAV. 89, 98 (1995) (citing studies of significant hindsight bias in surgeons' appraisal of surgical cases, physicians' medical diagnoses, women's reactions to pregnancy tests, voters' election predictions, and nurses' employee evaluations).

Hindsight bias is similarly problematic in the legal and judicial context. *See* J. Rachlinski, *Heuristics And Biases In The Courts: Ignorance Or Adaptation?*, 79 OR. L. REV. 61, 69-70 (2000) (discussing various empirical studies of hindsight bias in legal settings). For instance, knowledge of search and seizure outcome influences mock-jurors' judgments regarding the legality of the search and the damage awards against police officers for these illegal searches. *See* D.K. Kagehiro et al., *Hindsight Bias and Third-Party Consents to Warrantless Police Searches*, 15 LAW & HUM. BEHAV. 305 (1991); J.D. Casper et al., *Cognition, Attitudes, and Decision Making in Search and Seizure Cases*, 18 J. OF APPLIED SOC. PSYCHOL. 93 (1988); *see also* G.V. Bodenhausen, *Second-guessing the Jury: Stereotypic and Hindsight Biases in Perceptions of Court Cases*, 20 J. APPLIED SOC. PSYCHOL. 1112 (1990). Similarly, in another study in the tort context, 57% of subjects with hindsight knowledge that an accident actually occurred deemed negligent the failure to take precautionary measures, while 76% of subjects without this insight reached the converse conclusion and believed that the accident was too *unlikely* to have occurred to require the same precautions. Kamin & Rachlinski, *supra*, at 94-97.

In patent law, unchecked hindsight bias would threaten the careful incentives created by the statutory scheme. With the benefit of hindsight, many inventions, which were exceptional when discovered, may appear today to be unremarkable. For example, although the wheel or the number zero are obvious concepts today, the Incan civilization never used the wheel, while the Greek and Roman civilizations never discovered the algebraic zero. More recently, today Post-it® Notes may seem to be obvious, but that is only because they have been nearly ubiquitous in our daily lives for 25 years.

Further backing these examples is a recent empirical study demonstrating that hindsight bias prejudices patent decisions, including obviousness determinations, far more than anticipated. G. Mandel, *Patently Non-Obvious: Empirical Demonstration that the Hindsight Bias Renders Patent Decisions Irrational*, 67 OHIO ST. L.J. ___ (2006) (forthcoming). Because today's inventions are merely combinations of yesterday's knowledge, all the elements of a patent claim can ultimately be found—piece-by-piece—in the prior art and deemed obvious, once combined, under the influence of this cognitive bias. *Cf. Graham*, 383 U.S. at 36 (noting that secondary considerations "may also serve to guard against slipping into use of hindsight, and to resist the temptation to read into the prior art the teachings of the invention in issue." (internal quotation marks and citations omitted)).

In such a system where factfinders are more likely to invalidate patents, the incentive to strike the "patent bargain" – disclosure of the invention in return for limited-term patent rights – would be

skewed against patenting. Fewer inventors would choose to disclose their inventions, and fewer companies would risk long-term investments in research and development if their ability to protect those investments with patent rights were determined under the wholly subjective standards urged by KSR and its *amici*.

B. Eliminating the "Motivation, Suggestion, or Teaching" Standard Would Unsettle Long-Held Expectations of *Amici* and Other Patent Owners

In their zeal to overturn over twenty years of Federal Circuit obviousness jurisprudence, KSR and most of its *amici* ignore a crucial and salient consideration from the patent policy perspective: the settled expectations of the inventing community. Since its inception, the Federal Circuit has applied its "motivation, suggestion, or teaching" standard in hundreds, if not thousands, of cases. The Patent & Trademark Office has also reviewed and issued millions of patents based on this settled standard. As one of KSR's own *amici* concedes, the community of "practitioners, inventors, and businesses . . . have come to rely on it." IBM *Amicus* Br. at 16.

Every one of the patents currently in force today had its claims drafted to match that standard and examined under that standard. Companies like the *Amici* have invested billions of dollars on research and development, in long-term commitments of resources, and on building their patent portfolios under the "motivation, suggestion, or teaching" standard.

As this Court's own patent case law teaches, such settled expectations and reliance should not be easily

cast aside. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 739 (2002) (stating that "courts must be cautious before adopting changes that disrupt the settled expectations of the inventing community."). Chastising the Federal Circuit for disturbing well-settled expectations in suddenly adopting a strict approach to the doctrine of prosecution history estoppel, this Court explained:

> The responsibility for changing them [settled rules] rests with Congress. Fundamental alterations in these rules risk destroying the legitimate expectations of inventors in their property. The petitioner in *Warner-Jenkinson* requested another bright-line rule that would have provided more certainty in determining when estoppel applies but at the cost of disrupting the expectations of countless existing patent holders. We rejected that approach: "To change so substantially the rules of the game now could very well subvert the various balances the PTO sought to strike when issuing the numerous patents which have not yet expired and which would be affected by our decision."

Id. (quoting *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 32 n.6 (1997)); *see also Warner-Jenkinson*, 520 U.S. at 41 (Ginsburg, J., concurring) ("The new presumption, if applied woodenly, might in some instances unfairly discount the expectations of a patentee who had no notice at the time of patent prosecution that such a presumption would apply.").

Upending nearly a quarter-century of jurisprudence at this point would throw into question the va-

lidity of millions of issued patents, cause the reassessment of patent licenses worth billions of dollars, make patent litigation more difficult to settle, and inevitably create more litigation for the courts. Such a change would be particularly unfair because of its impact on issued patents: patentees would be stuck with negotiating their patent coverage under one standard, but having to defend it under a different standard.

Simply put, the Court should not revisit a fundamental issue of patent law, settled under nearly 25 years of Federal Circuit jurisprudence, and re-write the standard under which every patent currently in force was granted. The effects of such a sea change would be too destabilizing. Changes to the long-standing rules underlying patent validity must balance competing policy questions that are best left to Congress, not the courts.

III. THE FEDERAL CIRCUIT'S "MOTIVATION, SUGGESTION, OR TEACHING" TEST LESSENS HINDSIGHT BIAS, CONSISTENT WITH THE PATENT ACT AND THIS COURT'S PRECEDENT

KSR and its *amici* essentially ignore the very hindsight problem that the statute prohibits, that this Court's precedent has disapproved, and that the Federal Circuit's test aims to prevent. When properly viewed in light of this overlooked concern, one reaches the opposite conclusion than KSR and its *amici*: the Federal Circuit's test implements the broad mandates of the statutory language and this Court's precedent, while fulfilling the Federal Cir-

cuit's central role in adding uniformity to difficult and complex questions of patent law.

A. The Federal Circuit's Test Implements the Statutory Language and Promotes Congress's Intent by Minimizing Hindsight Bias

When it codified the judicially-created doctrine of "inventive novelty" in section 103 of the 1952 Patent Act, Congress aimed to foster greater "uniformity and definiteness" in patentability determinations. *Graham*, 383 U.S. at 15 (quoting S.Rep. No. 1979, at 6 (1952); H.R.Rep. No. 1923, at 7 (1952)). Particularly, Congress noted that "[t]his section should have a stabilizing effect and minimize great departures which have appeared in some cases." *Id.*

To achieve these goals, Congress adopted section 103 as an inquiry into "the differences between the subject matter sought to be patented and the prior art ... such that the subject matter as a whole would have been obvious *at the time the invention was made* to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C § 103(a) (emphasis added). By fixing the time frame for this inquiry "at the time the invention was made," Congress sought to minimize the deleterious effect of hindsight bias. *See* Giles S. Rich, *Laying the Ghost of the Invention Requirement*, 1 APLA Q.J. 26-45 (1972), *reprinted in* 14 Fed. Cir. B.J. 163, 170 (2004) ("To protect the inventor from hindsight rea-

soning, the time is specified to be *the time when the invention was made*." (emphasis in original)).[3]

Although requiring an inquiry "at the time the invention was made" is simple in formulation, such an *ex ante* determination often proves elusive in application. *See* Rachlinski, *supra*, at 70-71 ("Learning an outcome causes people to update their beliefs without even realizing it, making it impossible to restore, or even remember, the beliefs that they held before they learned the outcome."). While excluding evidence—such as post-accident remedial measures—can be an appropriate prophylactic in some context, *see* Fed. R. Evid. 407 advisory committee note (indicating that subsequent remedial measures are barely relevant and are suppressed out of a belief that fact-finders will give them more weight than is appropriate), evidence suppression is not a viable remedy for hindsight bias in obviousness inquiries, because the existence and understanding of the claimed subject matter is a prerequisite to any patent prosecution or litigation.

To implement the statutory requirement that courts must perform an *ex ante* obviousness inquiry, the Federal Circuit and its predecessor courts adopted the "motivation, suggestion, or teaching" test as a prophylactic against hindsight bias. By faithfully applying this test across a myriad of technologies and factual circumstances, the Federal Circuit promotes the legislative command of determin-

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[3] Judge Giles Rich, late of the Federal Circuit and its predecessor court, was instrumental in the drafting of the 1952 Patent Act for the House Judiciary Committee. *See* H.R.Rep. No. 1923, 82d Cong., 2d Sess. (1952), at 3.

ing obviousness "at the time the invention was made." Rather than being inconsistent with the statute, this test actually advances Congress's aim of imparting "uniformity and definiteness" to patentability determinations.

B. The "Motivation, Suggestion, or Teaching" Test Is Consistent with This Court's Precedent

According to KSR and its *amici*, the "motivation, suggestion, or teaching" test is inconsistent with this Court's obviousness jurisprudence. *E.g.*, Pet. Br. at 17-32; Gov't Br. at 11-16. However, a careful review of the Court's case law reveals language remarkably similar to the Federal Circuit's test, and policy implications identical in concern about hindsight bias.

Just three decades after the germinal case of *Hotchkiss v. Greenwood*, 52 U.S. (11 How.) 248 (1850), this Court issued a stern warning against the influence of hindsight in applying the *Hotchkiss* test:

> This argument would be sound if the combination claimed by Webster was an obvious one for attaining the advantages proposed, one which would occur to any mechanic skilled in the art. But it is plain from the evidence, and from the very fact that it was not sooner adopted and used, that it did not, for years, occur in this light to even the most skilful persons. It may have been under their very eyes, they may almost be said to have stumbled over it; but they certainly failed to see it, to estimate its value, and to bring it into notice. . . . Now that it has succeeded, it may seem very plain to any one that he could

> have done it as well. This is often the case with inventions of the greatest merit.

Webster Loom Co. v. Higgins, 105 U.S. (15 Otto) 580, 591 (1881) (finding patent valid and infringed). Since then, the Court has likewise cautioned against the danger of hindsight. *E.g.*, *Diamond Rubber Co. v. Consolidated Rubber Tire Co.*, 220 U.S. 428, 434-35 (1911) ("Many things, and the patent law abounds in illustrations, seem obvious after they have been done,"); *see also Graham*, 383 U.S. at 36.

To guard against the danger of hindsight, the Court has relied on *ex ante* factors to resolve questions of obviousness. In *Expanded Metal Co. v. Bradford*, 214 U.S. 366 (1909), for example, the Court granted *certiorari* to resolve a conflict between two circuit courts regarding the validity of a patent on an improved method of making expanded sheet metal. 214 U.S. at 371-74. In sustaining the patent's validity, the Court first rejected one court's *ex post* approach:

> It is often difficult to determine whether a given improvement is a mere mechanical advance, or the result of the exercise of the creative faculty amounting to a meritorious invention. The fact that the invention seems simple after it is made does not determine the question; if this were the rule, many of the most beneficial patents would be stricken down.

Id. at 381. Adopting a clear *ex ante* analysis which eschewed hindsight bias, this Court then reasoned:

> *There is nothing in the prior art that suggests the combined operation* of the Golding patent in suit. . . . Others working in the same field

> had not developed it, and *the prior art does not suggest the combination of operations which is the merit of Golding's invention.*

Id. (emphases added and internal citation omitted). Based on this reasoning, this Court held the patent valid and infringed. *Id.* at 382-86.

Over the next few decades, the Court relied on this approach to adjudicate a number of close obviousness cases. In *Thomson Spot Welder Co. v. Ford Motor Co.*, 265 U.S. 445 (1924), the Court deemed a patent on spot welding to be obvious, because "given the desire for a welding in spots, *naturally enough suggested by the prior art* and by its commercial development, we think [patentee]'s specific application of the principles of that prior art involved only the skill of the expert mechanic." *Id.* at 451 (emphasis added).

Years later, in *Jurgensen v. Ostby & Barton Co.*, 335 U.S. 560 (1949), the Court again looked to prior art's teachings and suggestions to adjudicate the validity of combination patents. The *Jurgensen* patent had previously survived an invalidity challenge in one circuit, but was invalidated in another circuit. On review and after considering "the prior art as it existed at the time of this alleged invention," this Court concluded that the steps claimed by the method patent were already used in analogous settings. *Id. at 564* , ("The above-described developments in the prior art suggested no limitation of their applicability to any particular type of casting."). Thus, the *Jurgensen* Court did not limit its inquiry to a subjective comparison of the claimed invention with the prior art; it instead considered whether the

prior art suggested, or taught away from, the claimed combination

The same reasoning was at work in *Mandel Bros. v. Wallace*, 335 U.S. 291, 292 (1948), where the Court invalidated a patent on the use of a urea-based preparation as an antiperspirant. In reaching this conclusion, the Court again adopted an *ex ante* perspective by analyzing the content of patents issued before the one in suit, and noting that these patents "point to the possibility of using urea to inhibit unwanted decomposition of substances containing acid or acid salts [as in perspiration]." *Id.* at 294. Based on the state of the prior art and its teachings, the Court concluded that "the general store of chemical knowledge in 1938 was such that any one working on any problem of acidic corrosion and irritation would naturally and spontaneously have tried urea." *Id.* at 296. As in *Thomson* and *Jurgensen*, the Court relied on the specific content, state, and teaching of the prior art as a guide in its obviousness ruling.

Even after 1952, this Court applied this *ex ante* reasoning in its obviousness determinations. In *United States v. Adams*, 383 U.S. 39 (1966), the patent admittedly covered a combination of old elements well-known in the art, so that the difference between the patent and the prior art was at best minimal. *Id.* at 51-52 (noting that "each of the elements of the Adams battery was well known in the prior art"). The patent's nonobviousness turned, however, on the prior art's teachings, which "when taken together, would, we believe, deter any investigation into such a combination as is used by Adams." *Id.* at 52. In other words, the prior art did not motivate the ordinary skilled artisan to make the claimed invention; it

actually taught away from such a combination. *Id.* ("We do say, however, that known disadvantages in old devices which would naturally discourage the search for new inventions may be taken into account in determining obviousness.").[4]

Thus, this Court's pre- and post-1952 cases have considered and relied on the prior art's "motivation, suggestion, or teaching" to adjudicate whether a claimed invention was obvious to the skilled artisan. The Federal Circuit's test is therefore a consistent application (rather than a rejection) of this Court's precedent.

IV. THE PROPOSED ALTERNATIVE TESTS DO NOT COMPORT WITH THE PATENT STATUTE, PRECEDENT, OR PUBLIC POLICY

To replace the Federal Circuit's "motivation, suggestion, or teaching" test, KSR's *amici* have advanced various alternatives, including: (i) the Government's focus on "extraordinary level of innovation"; (ii) IBM's rebuttable presumption; and (iii) KSR's abandoned "synergy" idea from its petition. Although each of these proposed standards may appear attractive on the surface, a more careful scrutiny reveals their inadequacy.

While the Government advocated a case-by-case test in its petition-level brief, it now espouses an-

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[4] *See also Dystar*, — F.3d —, 2006 WL 2806466, at *12-13 (reviewing post-1952 Supreme Court cases related to obviousness and concluding that the Federal Circuit's test is consistent with the Court's precedent).

other—albeit equally problematic—standard: "whether the claimed invention manifests the *extraordinary level* of innovation, beyond the capabilities of a person having ordinary skill in the art, that warrants the award of a patent." Gov't *Amicus* Br. at 10 (emphasis added). This test is, however, flawed for three reasons.

First, it does not flow from this Court's own precedent. Indeed, the Solicitor General does not cite a single Supreme Court case which turned on the determination of an *extraordinary* level of skill in the art. *See id.* at 11-24. To the contrary, the statute and this Court have consistently anchored the obviousness inquiry on whether the person having *ordinary* skill in the relevant art would deem the invention obvious. 35 U.S.C. § 103(a); *Graham*, 383 U.S. at 17; *Hotchkiss*, 52 U.S. at 267 (determining skill level of the "ordinary mechanic").

Second, the proposed inquiry does not provide any meaningful, objective guidance to the courts, agencies, litigants, or applicants. After all, whether an invention resulted from an extraordinary or ordinary level of skill is subjective and a matter of degree, boiling down to a "I'll know it when I see it" standard. Under such a subjective standard, reasonable minds—be it patent examiners, juries, district judges, or circuit judges—may and will differ widely.

Finally, the Government's test does not resolve the hindsight bias prohibited by 35 U.S.C. § 103(a) and this Court's precedent. At best, the proposed test merely condones an *ex post* adjudication of the patent's contributions by improperly raising the required skill level of an inventor.

Another proposed alternative test is IBM's rebuttable presumption test, in which "references should be *presumed* combinable by a person having ordinary skill in the art where the references are within the scope of the 'analogous art.'" IBM *Amicus* Br. at 18 (emphasis in original). Although IBM's proposal attempts to minimize hindsight bias through an objective *ex ante* test, it runs counter to the Patent Statute and imposes an inappropriate burden on patent applicants and patentees. Indeed, under IBM's test, a patent would be presumed obvious, and thus invalid, if it results from the combination of knowledge in the analogous art. Such a judicially created presumption would directly contradict and undermine the Congressionally sanctioned presumption of validity that attaches to all issued patents, 35 U.S.C § 282 ("A patent shall be presumed valid."), particularly since almost all inventions are combinations of preexisting components. It therefore cannot apply in post-issuance patent litigation.

But even in the patent prosecution context, where the presumption of validity does not attach, IBM's test alters the settled burden of proof. *See In re Kumar*, 418 F.3d 1361 (Fed. Cir. 2005) ("During examination, the examiner bears the initial burden of establishing a *prima facie* case of obviousness."). Worse yet, IBM's proposed standard would impose on the applicant the initial burden of proving a negative—that the invention is *not* obvious—at a time when few, if any, secondary considerations (which are typical evidentiary indications of nonobviousness) would exist. *See Elkins v. United States*, 364 U.S. 206, 218, (1960) ("[A]s a practical matter it is never easy to prove a negative"). For these reasons,

the test advocated by *amicus* IBM is equally unworkable.

As for KSR, it has abandoned the "synergy" test it advocated in its petition, and for good reason. That test would hold that an invention combining elements found in prior art references is obvious "unless the combination produces 'a new or different function' or demonstrates a 'synergistic result.'" KSR Pet. at 14 (citations omitted). As IPO's *amicus* brief explains, such a test is fraught with significant shortcomings, including the possible invalidation of existing worthwhile mechanical or hydraulic patents and the test's inconsistency with § 103's language and legislative history. *See* IPO *Amicus* Br. at 14-15. KSR's decision to jettison its proposed test speaks volumes about that standard's merits.

At bottom, despite any shortcomings, the Federal Circuit's test remains superior to its alternatives. It stands as the best standard for furthering Congress's policy and statutory command, and adhering to this Court's precedent, that obviousness determinations should not be colored by hindsight bias.

CONCLUSION

For the foregoing reasons, *Amici* support the decision of the Federal Circuit and urge affirmance by this Court.

Respectfully submitted,

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